

REMARKS

In response to the Office Action dated December 8, 2005, Applicant has amended claims 23-31 and added new claim 32. Accordingly, claims 1-32 are presented.

Drawings

Applicant submits formal drawings with this amendment and ask that the Examiner's objection to the drawings based on hand drawn lines and informal numbers and regions be withdrawn.

The Action indicates that figures 3 and 5-7 should be labeled as prior art. However, when viewed in light of the rest of the specification, these figures depict aspects that are new and are not, therefore, prior art. For example, Fig. 3 shows a high stability plane mirror interferometer which is a component of the system shown in Fig. 1 and 2. As described in the specification, this system is used to implement new methods for determining the location of an alignment mark on a stage and methods for characterizing surface variations of a mirror. Figs. 5 shows a lithography tool 1100 that includes an interferometry system 1126 which is used to implement the new methods. Fig. 7 shows a beam writing system 1200 which includes an interferometry system 1220 that is similarly used to implement the new methods. Fig. 6(a) and 6(b) are flow charts that describe steps for making integrated circuits. As would be understood by one of ordinary skill in the art when view in light of the rest of the specification, the "Wafer Manufacture" step 1153 in Fig. 6(a), for example, incorporates the new methods, as does the "Exposure" step 1166 in Fig. 6(b). Accordingly, none of Figs. 3 and 5-7 are prior art. Applicant asks that this objection to the drawings be withdrawn.

Claim Rejections

Claim Rejections – 35 U.S.C. § 112, ¶2

Claims 23-31 were rejected as being indefinite. Applicant has amended these claims and submit that, as amended, claims 23-31 comply with the requirements of 35 U.S.C. § 112, ¶2.

Accordingly, Applicant asks that the rejection of claims 23-31 under 35 U.S.C. § 112, ¶2 be withdrawn.

Claim Rejections – 35 U.S.C. § 102

Claim 15

Independent claim 15 was rejected as being allegedly anticipated by Kamiya (U.S. Pat. No. 5,790,253). Claim 15 requires “determining ... contributions from different spatial frequencies to surface imperfections of the mirror.” Kamiya does not explicitly disclose a method that includes this step. While Kamiya does disclose methods for characterizing imperfections in the surface of a mirror, his methods involve “integrating, in order, [] curving error data corrected for by the above technique.” (see, Kamiya, col. 8, line 49 – col. 9, line 30). Here, the curving error data refers to the displacement of the mirror surface along parallel axes acquired while translating the mirror orthogonally to the axes and the correction accounts for yawing of the stage that occurs while the curving error data is acquired (*id.*). Accordingly, while the data acquired using Kamiya’s methods may include contributions from different spatial frequencies to surface imperfections of the mirror, nowhere does Kamiya indicate that his methods involve determining these contributions. Therefore, Kamiya does not anticipate claim 15 and Applicant asks that the prior art rejection of claim 15 be withdrawn.

Claims 16-22

Independent claim 16 was also rejected as being allegedly anticipated by Kamiya. Claim 16 requires “an electronic controller coupled to the interferometer, wherein during operation the electronic controller determines a position, x_1 , of the mirror with respect to a first measurement axis based on information derived from the output beam and an error correction term that accounts for surface variations of the mirror for different spatial frequencies, wherein contributions to the error correction term from the different spatial frequencies are weighted differently.”

In addressing this limitation, the Action states that functional limitations “can be met by the prior art if the structure of the prior art is capable of performing the claimed functions”

(Office Action, page 8, second para.). To support this position, the Action cites In re Schrieber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997), where “[t]he absence of a disclosure in a prior art reference relating to function did not defeat the Board’s finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference” (Office Action, page 8, emphasis added).

As best we understand, the Action’s position is that Kamiya’s main controller 18 is an electronic controller that allegedly *could* be configured (e.g., programmed) to determine the position, x_1 , of the mirror as set forth in independent apparatus claim 16, and therefore, under In re Schrieber, the apparatus claim is anticipated. We respectfully submit that even if Kamiya’s main controller could be configured to determine the position, x_1 , of the mirror as set forth in independent apparatus claim 16, the Action reads In re Schrieber too broadly and applies it incorrectly in this instance.

The Federal Circuit maintained the anticipation rejection in In re Schrieber based on facts showing that the prior art nozzle had the same shape and size as that for the popcorn lid disclosed in the Schrieber application for dispensing popcorn in the manner functionally claimed in the rejected claims, and as result, the prior art oil can was *inherently* capable of performing the claimed function. In re Schrieber, 128 F.3d at 1478-1479. On the other hand, the Federal Circuit reiterates that:

A patent applicant is free to recite features of an apparatus either structurally or functionally. See In re Swinehart, 58 C.C.P.A. 1027, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971) (“[T]here is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent claims.”). In re Schrieber, 128 F.3d at 1478.

For the Examiner’s convenience, we enclose a copy of In re Schrieber for his review.

Accordingly, the issue in the present application is whether Kamiya’s controller *inherently* capable of performing the function carried out by the claimed electronic controller of claim 16. However, Federal Circuit case law makes clear that such inherency must *necessarily* be present to support the alleged anticipation:

"[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) ... "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' ... " *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1367, 71 USPQ2d 1081, 1091 (Fed. Cir. 2004)" MPEP 2112 [R-3] IV (emphasis added).

Here, the action seems to concede that the controller in Kamiya is not configured to "determine[] a position, x_1 , of the mirror with respect to a first measurement axis based on information derived from [an interferometer] output beam and an error correction term that accounts for surface variations of the mirror for different spatial frequencies, wherein contributions to the error correction term from the different spatial frequencies are weighted differently," as recited in claim 16. To the contrary, Kamiya's controller carries out different methods.

While it may indeed be *possible* for Kamiya's controller to be programmed according to the invention of claim 16, that is clearly not sufficient to establish the level of inherency necessary to support the present anticipation rejection, according to the legal principles cited above. Indeed, if it were, every apparatus claim embodying inventive electronic processing steps would be *per se* unpatentable in view of a generic programmable computer, which is simply an absurd result. Accordingly, we ask the Examiner to withdraw the rejection.

The Office Action also rejected claims 17-22 as being allegedly anticipated by Kamiya. However, because claims 17-22 depend, either directly or indirectly, from claim 16, these claims should be allowable over Kamiya for at least those reasons set forth above with respect to claim 16. Applicant asks that the prior art rejection of these claims be withdrawn.

Allowable Subject Matter

Applicant thanks the Examiner for his indication that claims 1-14 are allowed.

New Claims

Applicant has added new claim 32, which is directed to an apparatus and requires that the apparatus include "a means for determining a position, x_1 , of [a] mirror with respect to a first measurement axis based on information derived from [an] output beam and an error correction term that accounts for surface variations of the mirror for different spatial frequencies, wherein contributions to the error correction term from the different spatial frequencies are weighted differently." Kamiya does not disclose or suggest an apparatus that includes such a means. Claim 32 is, therefore, patentable over Kamiya. Applicant asks that claim 32 be allowed.

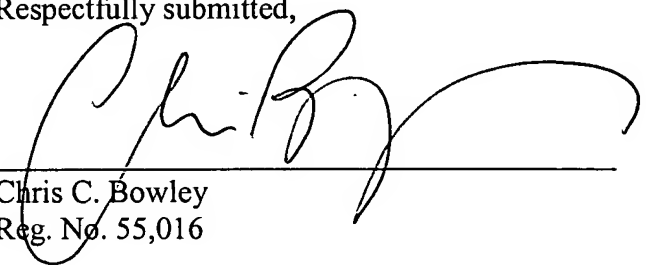
Conclusion

Applicant submits that all claims are in condition for allowance, which action is requested. Enclosed is a check for the Petition of Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Date: _____

4/10/2006

Respectfully submitted,



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Briefs and Other Related Documents

United States Court of Appeals,
Federal Circuit.
In Re SCHREIBER
No. 97-1201.

Oct. 23, 1997.

Rehearing Denied; Suggestion for Rehearing En
Banc Declined Dec. 17, 1997.

Applicant sought patent upon device for dispensing popped popcorn. The Patent and Trademark Office's Board of Patent Appeals and Interferences sustained final rejection of four claims, and applicant appealed. The Court of Appeals, Bryson, Circuit Judge, held that: (1) claim reciting dispensing top alone was anticipated by prior art, and (2) claim which recited dispensing top with means to close off opening of dispensing top was unpatentable as obvious.

Affirmed.

Pauline Newman, Circuit Judge, filed dissenting opinion.

West Headnotes

[1] Patents **65**291k65 Most Cited Cases

To anticipate patent claim, prior art reference must disclose every limitation of claimed invention, either explicitly or inherently.

[2] Patents **314(4)**291k314(4) Most Cited Cases

Anticipation of patent claim is issue of fact, and question whether claim limitation is inherent in prior art reference is factual issue on which evidence may be introduced.

[3] Patents **66(1.1)**291k66(1.1) Most Cited Cases**[3] Patents** **66(1.3)**291k66(1.3) Most Cited Cases

Proposed claim in patent application for device used to dispense popped popcorn was anticipated by

foreign patent, even if foreign patent did not disclose that its structure could be used to dispense popcorn from open-ended popcorn container; structural limitations recited in claim were all found in foreign patent, and functional limitations of claim did not give claim patentable weight because those limitations were inherent in prior art reference. 35 U.S.C.A. § 102(b).

[4] Patents **7.5**291k7.5 Most Cited Cases

Recitation of new intended use for old product does not make claim to that old product patentable.

[5] Patents **66(1.1)**291k66(1.1) Most Cited Cases

Question whether reference is analogous art is irrelevant to whether that reference anticipates patent claim; reference may be from entirely different field of endeavor than that of claimed invention or may be directed to entirely different problem from one addressed by inventor, yet reference will still anticipate if it explicitly or inherently discloses every limitation recited in claims. 35 U.S.C.A. § 102(b).

[6] Patents **312(1.2)**291k312(1.2) Most Cited Cases

Once patent examiner found prima facie case of anticipation based on particular prior art reference, burden shifted to patent applicant to show that prior art structure did not inherently possess functionally defined limitations of claimed apparatus. 35 U.S.C.A. § 102(b).

[7] Patents **16.4**291k16.4 Most Cited Cases

Alleged failure of prior art reference to provide same function of "means for closing off" device claimed in prior art reference as provided in patent application's claim for popcorn dispenser did not prevent reliance on prior art reference to determine that application's claim was obvious; functions cited by applicant were not recited as part of claim's means-plus-function clause and thus could not impart patentability to claim. 35 U.S.C.A. § 103.

[8] Patents **163**291k163 Most Cited Cases

Patent applicant could not claim that prior art reference which allegedly rendered proposed patent claim obvious was non-analogous art, on grounds

that applicant claimed popcorn dispenser while prior art related to device for pouring oil from oil can, where applicant acknowledged in specification that prior art pertinent to his invention included patents relating to dispensing fluids. 35 U.S.C.A. § 103.

Patents 328(2)

291k328(2) Most Cited Cases

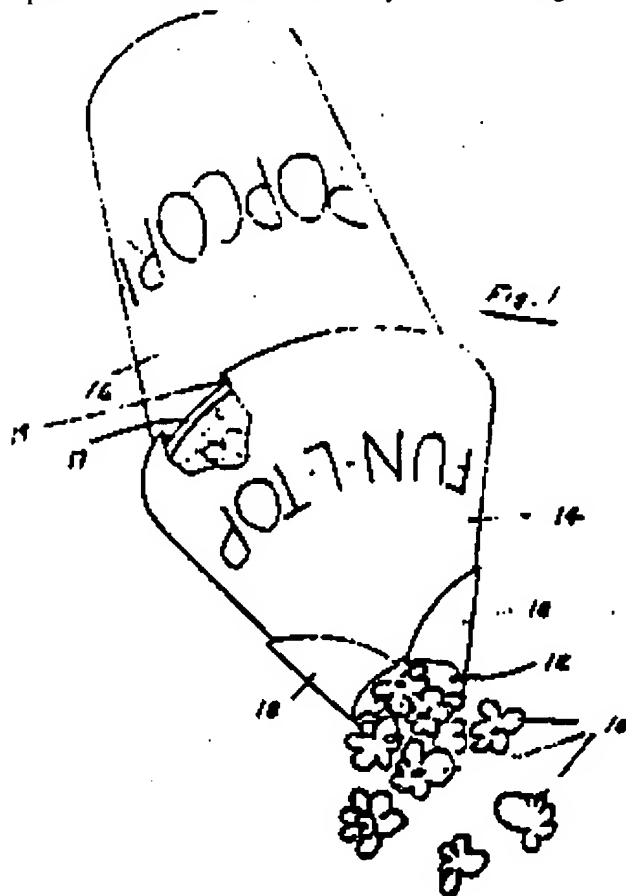
Cited as prior art.

*1474 Joseph B. Taphorn, Poughkeepsie, NY, argued for appellant.

Joseph G. Piccolo, Associate Solicitor, Office of the Solicitor, Patent and Trademark Office, Department of Commerce, Arlington, VA, argued for appellee. With him on brief were Nancy J. Linck, Solicitor, Albin F. Drost, Deputy Solicitor, and Karen A. Buchanan, Associate Solicitor.

Before NEWMAN, PLAGER, and BRYSON, Circuit Judges.

Opinion for the court filed by Circuit Judge



Schreiber filed a number of claims, and the examiner

BRYSON. Dissenting opinion filed by Circuit Judge PAULINE NEWMAN.

BRYSON, Circuit Judge.

Stephen B. Schreiber appeals the decision of the United States Patent and Trademark Office's Board of Patent Appeals and Interferences sustaining a final rejection of four claims of Schreiber's patent application. We affirm.

I

Schreiber's patent application claims a device for dispensing popped popcorn. The device is conically shaped with a large opening that fits on a container and a smaller opening at the opposite end that allows popped popcorn to pass through when the device is attached to a popcorn container and turned upside down. An embodiment disclosed in Schreiber's patent application is depicted below.

*1475

allowed many of the claims. Claims 1, 2, 14, and 15 were finally rejected, however, and those claims are

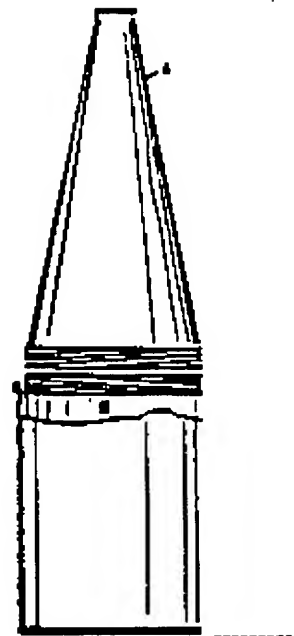
the subjects of this appeal. Claim 1 recites:

A dispensing top for passing only several kernels of a popped popcorn at a time from an open-ended container filled with popped popcorn, having a generally conical shape and an opening at each end, the opening at the reduced end allows several kernels of popped popcorn to pass through at the same time, and means at the enlarged end of the top to embrace the open end of the container, the taper of the top being uniform and such as to by itself jam up the popped popcorn before the end of the cone and permit the dispensing of only a few kernels at a shake of a package when the top is mounted on the container.

Claim 2 is similar to claim 1 but additionally recites that the top comprises a "means at the reduced end of the top to close-off the opening thereat." The other two claims, claims 14 and 15, depend from claims 1 and 2, respectively. Schreiber does not argue that claims 14 and 15 are patentable if claims 1 and 2 are not. Accordingly, because we affirm the rejection of claims 1 and 2, we need not address claims 14 and 15.

Claim 1 was rejected by the examiner under 35 U.S.C. § 102(b) as being anticipated by Swiss Patent No. 172,689 to Harz. The Harz patent discloses "a spout for nozzle-ready canisters," which may be tapered inward in a conical fashion, and it states that the spout is useful for purposes such as dispensing oil from an oil can. The examiner explained that Harz discloses a conical dispensing top for an open-ended container and concluded that "the Harz top is clearly capable of dispensing popped popcorn." Figure 5 from Harz is depicted below.

*1476



Claim 2 was rejected by the examiner under 35 U.S.C. § 103 as being unpatentable over the combination of Harz and U.S. Patent No. 3,537,623 to Fisher. The examiner stated that although Harz does not disclose a "means at the reduced end of the top to close-off the opening thereat," Fisher does. The examiner concluded that it would have been obvious to one of ordinary skill in the art to modify Harz in view of Fisher in order to "seal[] the container contents from contaminates."

In response to the patent examiner's rejections, Schreiber submitted a declaration stating that the conical dispensing top depicted in figure 5 of Harz was incapable of "jam[ming] up the popped popcorn before the end of the cone and permit[ing] the dispensing of only a few kernels at a shake of a package when the top is mounted on the container." The examiner did not enter that declaration in the record because he believed it had not been properly submitted. When Schreiber appealed to the Board, the Board remanded the case to the examiner to consider the declaration. On remand, the examiner considered the declaration but found that it did not provide sufficient information to support Schreiber's assertion that a dispensing top built according to Harz does not inherently possess the functionally defined limitations recited in the claims.

Schreiber again appealed to the Board, which upheld the rejections. The Board first found that Harz discloses every limitation recited in claim 1. Several of the recitations in the claims, the Board concluded,

merely set forth the function and intended use of the top and therefore did not require any structural feature other than those taught by Harz. The Board found that the structure disclosed by Harz is inherently capable of dispensing popcorn in the manner set forth in the claims, and that Schreiber's declaration did not provide enough details to prove that the structure disclosed by Harz is incapable of performing the claimed functions of Schreiber's invention.

In response to Schreiber's argument that the conical dispensing top disclosed in Harz is designed to dispense liquids such as oil, rather than solid items such as popcorn, and that it is not large enough to pass popcorn kernels, the Board noted that the Harz patent referred to the use of the claimed device for lubricating oil only as an "example," and found that one of skill in the art "would perceive the top of Harz as being of broader application." The Board further found that the dispensing top disclosed in Harz "is of a relative size and has a taper which would inherently permit popped popcorn kernels to jam up before the end of the cone and permit the dispensing of only a few kernels at a *1477 shake of the package" when the top is mounted on a popped popcorn container. Accordingly, the Board concluded that "all the limitations of claim 1 are found in Harz, either expressly or under the principles of inherency, and this claim is clearly anticipated thereby."

As for claim 2, the Board found that Fisher disclosed a means for closing off the smaller end of a conically shaped top and further found that it would have been obvious to one of ordinary skill in the art to provide a close-off mechanism for a top of the sort disclosed by Harz, to prevent dirt and other contaminating matter from entering the opening in the device. Schreiber appeals both of the Board's determinations.

II

[1][2] Schreiber first argues that Harz does not anticipate claim 1. To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. See *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047, 34 USPQ2d 1565, 1567 (Fed.Cir.1995). Anticipation is an issue of fact, see *In re Graves*, 69 F.3d 1147, 1151, 36 USPQ2d 1697, 1700 (Fed.Cir.1995); *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 677, 7 USPQ2d 1315, 1317 (Fed.Cir.1988), and the question whether a claim limitation is inherent in a prior art reference is a factual issue on which evidence may be introduced, see *Continental Can Co. USA v. Monsanto Co.*, 948

F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed.Cir.1991).

[3] There is no dispute that the structural limitations recited in Schreiber's application are all found in the Harz reference upon which the examiner and the Board relied. Thus, to use the terms found in Schreiber's claim 1, Harz discloses a "dispensing top" that has "a generally conical shape and an opening at each end," and "means at the enlarged end of the top to embrace the open end of the container, the taper of the top being uniform." Schreiber argues, however, that Harz does not disclose that such a structure can be used to dispense popcorn from an open-ended popcorn container.

[4] Although Schreiber is correct that Harz does not address the use of the disclosed structure to dispense popcorn, the absence of a disclosure relating to function does not defeat the Board's finding of anticipation. It is well settled that the recitation of a new intended use for an old product does not make a claim to that old product patentable. See *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed.Cir.1990) ("The discovery of a new property or use of a previously known composition, even when that property and use are unobvious from prior art, can not impart patentability to claims to the known composition."); *Titanium Metals Corp. of Am. v. Banner*, 778 F.2d 775, 782, 227 USPQ 773, 778 (Fed.Cir.1985) (composition claim reciting a newly discovered property of an old alloy did not satisfy section 102 because the alloy itself was not new); *In re Pearson*, 494 F.2d 1399, 1403, 181 USPQ 641, 644 (CCPA 1974) (intended use of an old composition does not render composition claim patentable); *In re Zierden*, 56 C.C.P.A. 1223, 411 F.2d 1325, 1328, 162 USPQ 102, 104 (CCPA 1969) ("[M]ere statement of a new use for an otherwise old or obvious composition cannot render a claim to the composition patentable."); *In re Sinex*, 50 C.C.P.A. 1004, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962) (statement of intended use in an apparatus claim failed to distinguish over the prior art apparatus); *In re Hack*, 44 C.C.P.A. 954, 245 F.2d 246, 248, 114 USPQ 161, 162 (CCPA 1957) ("the grant of a patent on a composition or a machine cannot be predicated on a new use of that machine or composition"); *In re Benner*, 36 C.C.P.A. 1081, 174 F.2d 938, 942, 82 USPQ 49, 53 (CCPA 1949) ("no provision has been made in the patent statutes for granting a patent upon an old product based solely upon discovery of a new use for such product"). Accordingly, Schreiber's contention that his structure will be used to dispense popcorn does not have

patentable weight if the structure is already known, regardless of whether it has ever been used in any way in connection with popcorn.

[5] Schreiber makes the closely related argument that Harz does not anticipate claim 1 because Harz is non-analogous art to which one of ordinary skill in the art would not have looked in addressing the problem of dispensing tops for popped popcorn containers. *1478 However, the question whether a reference is analogous art is irrelevant to whether that reference anticipates. *See In re Self*, 671 F.2d 1344, 1350, 213 USPQ 1, 7 (CCPA 1982). A reference may be from an entirely different field of endeavor than that of the claimed invention or may be directed to an entirely different problem from the one addressed by the inventor, yet the reference will still anticipate if it explicitly or inherently discloses every limitation recited in the claims.

Schreiber further argues that the functional limitations of his claim distinguish it from Harz. In particular, Schreiber points to the recitation that the claimed top "allows several kernels of popped popcorn to pass through at the same time," and that the taper of the top is such "as to by itself jam up the popped popcorn before the end of the cone and permit the dispensing of only a few kernels at a shake of a package when the top is mounted on the container."

A patent applicant is free to recite features of an apparatus either structurally or functionally. *See In re Swinehart*, 58 C.C.P.A. 1027, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971) ("[T]here is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent claims."). Yet, choosing to define an element functionally, *i.e.*, by what it does, carries with it a risk. As our predecessor court stated in *Swinehart*, 439 F.2d at 213, 169 USPQ at 228:

where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

See also In re Hallman, 655 F.2d 212, 215, 210 USPQ 609, 611 (CCPA 1981); *In re Ludtke*, 58 C.C.P.A. 1159, 441 F.2d 660, 663-64, 169 USPQ 563, 565-67 (CCPA 1971).

The examiner and the Board both addressed the

question whether the functional limitations of Schreiber's claim gave it patentable weight and concluded that they did not, because those limitations were found to be inherent in the Harz prior art reference. To begin with, contrary to the characterization in the dissent, nothing in Schreiber's claim suggests that Schreiber's container is "of a different shape" than Harz's. In fact, as shown above, an embodiment according to Harz (Fig.5) and the embodiment depicted in figure 1 of Schreiber's application have the same general shape. For that reason, the examiner was justified in concluding that the opening of a conically shaped top as disclosed by Harz is inherently of a size sufficient to "allow[] several kernels of popped popcorn to pass through at the same time" and that the taper of Harz's conically shaped top is inherently of such a shape "as to by itself jam up the popped popcorn before the end of the cone and permit the dispensing of only a few kernels at a shake of a package when the top is mounted on the container." The examiner therefore correctly found that Harz established a *prima facie* case of anticipation.

[6] At that point, the burden shifted to Schreiber to show that the prior art structure did not inherently possess the functionally defined limitations of his claimed apparatus. *See In re Spada*, 911 F.2d at 708, 15 USPQ2d at 1658; *In re King*, 801 F.2d 1324, 1327, 231 USPQ 136, 138-39 (Fed.Cir.1986); *In re Best*, 562 F.2d 1252, 1254-55, 195 USPQ 430, 433 (CCPA 1976). The Board found that Schreiber failed to do so, and we agree. Schreiber's declaration asserts that he built a conically shaped top according to figure 5 of Harz and that it was too small to jam and dispense popcorn as recited in the claim. The declaration, however, does not specify the dimensions of either the dispensing top that was tested or the popcorn that was used.

Moreover, the Board found as a factual matter that the top disclosed in figure 5 of the Harz patent "is capable of functioning to dispense kernels of popped popcorn in the manner set forth in claim 1." Starting with Schreiber's assumption that Harz should be limited to use as an attachment to an oil can, the Board scaled figure 5 to the proportions necessary to fit the Harz container on top of a standard one-quart oil can, as Schreiber suggested in his request for reconsideration. After scaling the Harz figure in that manner, the Board found that the Harz dispenser *1479 would be capable of dispensing popcorn in the manner set forth in claim 1 of Schreiber's application.

The dissenting opinion incorrectly states that the

Board "us[ed] Mr. Schreiber's invention as a template" in determining that the Harz dispenser anticipates Schreiber's invention. In fact, the Board simply scaled the dispenser illustrated in Harz figure 5 up to the size necessary to fit a standard oil can, without changing the proportions of the figure in any way. (The top depicted in figure 5 of the Harz patent was obviously not intended to be a full-sized representation of the Harz invention, any more than the top depicted in figure 1 of Schreiber's application was intended to be a full-sized representation of his invention.) The portion of the dissenting opinion addressed to this point is therefore based on a false premise--that the prior art device was "altered by the Board and then found to anticipate a different invention in whose image it was recreated." The Board's finding that the scaled-up version of figure 5 of Harz would be capable of performing all of the functions recited in Schreiber's claim 1 is a factual finding, which has not been shown to be clearly erroneous. On this ground alone, the Board's anticipation ruling must be upheld.

In any event, however, it is not enough for Schreiber to contend that a top built according to the proportions of figure 5 of Harz is incapable of performing the jamming and dispensing functions. The figures from Harz were provided only as "design examples of the invention"; the disclosure of the Harz patent is thus much broader than the precise conical shape disclosed in figure 5. Moreover, contrary to Schreiber's suggestion, the structure disclosed in Harz is not limited to use as an oil can dispenser. While that use is given as the principal example of the uses to which the invention could be put, nothing in the Harz patent suggests that the invention is in any way limited to that use. In sum, Schreiber's declaration fails to show that Harz inherently lacks the functionally defined limitations recited in claim 1 of the application. Accordingly, we agree with the Board that Schreiber has failed to rebut the prima facie case of anticipation identified by the examiner. The Board's factual finding on the issue of anticipation is therefore affirmed.

III

Schreiber also challenges the Board's finding that claims 2 and 15 are unpatentable under 35 U.S.C. § 103 as being obvious over the combination of Harz and Fisher. Schreiber argues that the combination of Harz and Fisher does not disclose all the limitations of claim 2 because neither Harz nor Fisher discloses the functionally defined features of the top. That argument is without merit because, as we have already noted, Harz discloses those functionally

defined limitations.

[7] Schreiber also argues that Fisher does not provide the function that the "means for closing off" in Schreiber's application provides. The functions Schreiber cites--enabling a person to carry a popped-popcorn package in a non-upright position without spillage, keeping the popcorn warm, and facilitating the mixing of ingredients--are not recited as part of the means-plus-function clause in claim 2. Accordingly, those functions cannot impart patentability to the claim.

[8] Schreiber further argues that Fisher is non-analogous art because Fisher relates to pouring oil from an oil can whereas Schreiber's invention relates to popcorn dispensing. That argument was not raised before the Board and we therefore decline to consider it for the first time on appeal. Even if we were to consider that argument, however, we note that Schreiber acknowledges in the specification that the prior art pertinent to his invention includes patents relating to dispensing fluids. Schreiber therefore may not now argue that such patents are non-analogous art. See Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1063 (Fed.Cir.1988); In re Fout, 675 F.2d 297, 300, 213 USPQ 532, 535 (CCPA 1980); In re Wood, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979); In re Nomiya, 509 F.2d 566, 571, 184 USPQ 607, 611-12 (CCPA 1975). Accordingly, we find no error in the Board's *1480 determination that claims 2 and 15 would have been obvious.

AFFIRMED.

PAULINE NEWMAN, Circuit Judge, dissenting.

I respectfully dissent. The panel majority affirms the PTO position that the express limitations of the claims are irrelevant when dealing with a rejection on the ground of "anticipation." The court thus departs from the rules of claim interpretation on which we have placed so much weight. The Federal Circuit has held, over and over, that every claim limitation is important and none can be ignored--and now proceeds to ignore several express limitations. Thus the panel incongruously holds that a claim that requires, explicitly and precisely, a container of popcorn and a dispenser that passes only a few kernels of popcorn before jamming, is "anticipated" by an oil can of a different shape as illustrated in a reference that neither shows nor suggests a container filled with popcorn or the jamming of the dispenser upon dispensing the popcorn. I feel for those who

tread the arcane path of patent soliciting, for this court's insistence on the importance of the limitations in the claims seems to have lost its way.

Schreiber's claims 1 and 14 are representative:

1. A dispensing top for passing only several kernels of a popped popcorn at a time from an open-ended container filled with popped popcorn, having a generally conical shape and an opening at each end, the opening at the reduced end allows several kernels of popped popcorn to pass through at the same time, and means at the enlarged end of the top to embrace the open end of the container, the taper of the top being uniform and such as to by itself jam up the popped popcorn before the end of the cone and permit the dispensing of only a few kernels at a shake of a package when the top is mounted on the container.

14. A package consisting of a container having popped popcorn and having an open end and embracing thereat a dispensing top according to claim 1.

The Board held that it is irrelevant that the Schreiber claims are limited to a container filled with popped popcorn with the additional limitation of dispensing a few kernels at a time before the dispenser jams up. No popcorn container or dispenser was cited by the PTO, and no similar claim limitations were cited by the PTO. These claim limitations can not be ignored. See Perkin-Elmer Corp. v. Westinghouse Elec. Corp., 822 F.2d 1528, 1532, 3 USPQ2d 1321, 1324 (Fed.Cir.1987) (the court can not ignore a plethora of meaningful limitations). Patentability is determined for the invention as claimed, with all its limitations. It is improper to delete explicit limitations from the claim in order to find the residue in the prior art.

A

"That which infringes if later anticipates if earlier." Polaroid Corp. v. Eastman Kodak Co., 789 F.2d 1556, 1573, 229 USPQ 561, 574 (Fed.Cir.1986) (citing Peters v. Active Mfg. Co., 129 U.S. 530, 537, 9 S.Ct. 389, 391-92, 32 L.Ed. 738 (1889)). It is inconceivable that this or any court would find Mr. Schreiber's claims to this popcorn dispenser infringed by the oil can of the Harz reference. The claim limitations that the container is filled with popped popcorn and that only a few kernels of popcorn are released at a time could not be ignored in an infringement action, and they are not properly ignored in a patentability action.

The Board, using Mr. Schreiber's invention as a template, rescaled the prior art and filled the oil can

with popcorn. This exercise of hindsight is not "anticipation." The law of anticipation requires that the same invention, with all the limitations of the claims, existed in the prior art. See Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920-21 (Fed.Cir.1989) ("anticipation" requires that the identical invention is described in a single prior art reference). A prior art device can not be altered by the Board and then found to anticipate a different invention in whose image it was recreated.

In responding to the PTO's rejection, Mr. Schreiber made an actual conical top according to the Harz oil can's proportions, and reported that the popcorn did not behave as in his device. The Board then proposed that *1481 Mr. Schreiber had erred in determining the diameter of the opening, and postulated that with the appropriate opening the Harz oil can might behave as does Mr. Schreiber's container. Mr. Schreiber says this is incorrect. I say it is irrelevant. See, e.g., Richardson, 868 F.2d at 1236, 9 USPQ2d at 1920 (every element of the claim must be shown in the reference, including all limitations); In re Paulsen, 30 F.3d 1475 (the reference must describe the claimed invention sufficiently to place it in the possession of a person of ordinary skill in the field).

Mr. Schreiber's popcorn dispenser is not described in the prior art. Statements in the claims that define and limit the device are material limitations, for purposes of infringement and for purposes of distinguishing from the prior art. See, e.g., Rowe v. Dror, 112 F.3d 473, 478-79, 42 USPQ2d 1550, 1553-54 (Fed.Cir.1997) (the field of the invention as stated in a Jepson-type claim limits the invention); Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 677-78, 7 USPQ2d 1315, 1317 (Fed.Cir.1988) (limitations stated in the preamble limit the claimed invention); In re Stencel, 828 F.2d 751, 754-55, 4 USPQ2d 1071, 1073 (Fed.Cir.1987) (function stated in claim distinguishes from prior art). The rejection for lack of novelty is simply incorrect.

In Warner-Jenkinson Co. v. Hilton Davis Chem. Co., --- U.S. ---, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997) the Court stressed the importance of claim limitations. The cases cited by the panel majority relate to the discovery of a new use of a known composition or device, and hold that the discovery of that use does not render patentable that which is already known. However, Schreiber's device is not known, but is new, and the claims are explicitly so limited. See Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1255-57, 9

USPQ2d 1962, 1965-66 (Fed.Cir.1989) ("To read the claim in light of the specification indiscriminately to cover all types of optical fibers would be divorced from reality."); W.L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540 or 842 F.2d 1275 (anticipation can not be based on conjecture). The claimed popcorn dispenser having a novel structure and function, whereby the container is filled with popcorn and after a few kernels of popcorn are released the dispenser jams up, is not in the cited prior art. The explicit claim limitations must be considered in determination of anticipation, just as they would be considered in construing the claims for the purpose of determining infringement. They can not be ignored.

Since no prior art shows this device, it can not be "anticipated" as lacking novelty.

B

The panel majority suggests that it would be "inherent" to use the oil can as a popcorn dispenser. An inherent disclosure, to be invalidating as an "anticipation," is a disclosure that is necessarily contained in the prior art, and would be so recognized by a person of ordinary skill in that art. Continental Can Co. USA, Inc. v. Monsanto Co., 948 F.2d 1264, 1268-69, 20 USPQ2d 1746, 1749-50 (Fed.Cir.1991). "Inherency" charges the inventor with knowledge that would be known to the art, although not described. Inherency is not a matter of hindsight based on the applicant's disclosure: the missing claim elements must necessarily be present in the prior art.

The authority cited by the majority, relating to claiming a known composition or device based on discovery of a new use, is inapt. It is of course correct that the discovery of a new use of a known composition or device does not render that composition or device patentable per se. The reason, however, is not "inherency"; it is that the composition or device is already known to the public, and can not be removed from the public. (The new use can of course be claimed as a method of use.) In this case, however, Mr. Schreiber has created a new device, not previously known to the public, and has claimed his new device with explicit limitations that distinguish it from previously known devices.

In passing, I also observe that the majority errs in stating that advantages not recited in the claim can not impart patentability to a new device. The advantages of an invention are often relied on to support patentability; whether they are included in the claim depends on a variety of factors, and is not the subject of a rigid rule.

*1482 The issue in this case is anticipation; that is, novelty. Since the claimed invention is not described in a single prior art reference, it is not "anticipated."

128 F.3d 1473, 44 U.S.P.Q.2d 1429

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- [1997 WL 33539227](#) (Appellate Brief) Reply Brief for Appellant (May. 16, 1997)
- [1997 WL 33539225](#) (Appellate Brief) Brief and Supplemental Appendix for Appellee Commissioner of Patents and Trademarks (May. 08, 1997)
- [1997 WL 33539220](#) (Appellate Brief) Brief for Appellant (Mar. 12, 1997)

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